

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended)      A peptide ~~comprising~~ consisting of the sequence R<sub>1</sub>-X<sub>1</sub>-V-R-X<sub>4</sub>-R<sub>2</sub> or partial or full retro-inverso sequences thereof, wherein X<sub>1</sub> is selected from the group consisting of N, Q, D and S; and X<sub>4</sub> is selected from the group consisting of L and F; R<sub>1</sub> is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R<sub>2</sub> is a peptide of 1 to 3 amino acids, a hydroxide or an amide, provided that the peptide binds  $\alpha$ 3 $\beta$ 1 integrin and does not comprise the sequence FQGV LQNVR FVF (SEQ ID NO:6) or FRGCVRNLRLSR (SEQ ID NO:12) or DVRF (SEQ ID NO:54).
  
2. (Currently amended)      The peptide of claim 1 ~~containing from~~, wherein the peptide contains the sequence X<sub>1</sub>-V-R-X<sub>4</sub> and is about 4 amino acids to about 12 amino acids in length.
  
3. (Currently amended)      The peptide of claim 1 wherein R<sub>1</sub> is a peptide ~~comprising~~ consisting of the sequence selected from the group consisting of FQGV LQ (SEQ ID NO:13), FAGV LQ (SEQ ID NO:14), FQGV AQ (SEQ ID NO:15), FQGV LA (SEQ ID NO:16), and FQGV LN (SEQ ID NO:17).
  
4. (Currently amended)      The peptide of claim 1, wherein said peptide ~~comprises~~ consists of at least one sequence selected from the group consisting of FQGV LQQVR FVF (SEQ ID NO:20), FQGV LQSVR FVF (SEQ ID NO:21), acQGV LQNVR F (SEQ ID NO:22), FQGV LNNVR FVF (SEQ ID NO:24), AQGV LQNVR FVF (SEQ ID NO:25), FAGV LQNVR FVF (SEQ ID NO:26), FQGV AQNVR FVF (SEQ ID NO:27), FQGV LQNVR FVA (SEQ ID NO:28), FQGV LANVR FVF (SEQ ID NO:29), FQGV LQNVR FV (SEQ ID NO:30), QGV LQNVR FVF (SEQ ID NO:31), and FQGV LQNVR F (SEQ ID NO:32).

5. (Previously presented) The peptide of claim 1 wherein  $X_1$ - $X_2$ - $X_3$ - $X_4$  is selected from the group consisting of NVRF (SEQ ID NO:51), SVRF (SEQ ID NO:52), and QVRF (SEQ ID NO:53).

6. (Canceled)

7. (Currently amended) The peptide of claim 1 that ~~comprises~~ contains at least one D-amino acid.

8. (Currently amended) A retro-inverso synthetic peptide ~~comprising~~ consisting of the amino acids sequence, from C-terminal (left) to N-terminal (right):  $ri$ - $R'_1$ - $X'_1$ - $X'_2$ - $X'_3$ - $X'_4$ - $R'_2$ , wherein  $ri$  denotes a retro-inverso peptide and all amino acids are D amino acids;  $X'_1$  is selected from the group consisting of N, Q, D and S;  $X_2$  is selected from the group consisting of V, I and L;  $X_3$  is selected from the group consisting of R and K; and  $X_4$  is selected from the group consisting of V, I, L and F;  $R'_1$  is a hydrogen or a peptide of 1 to 6 amino acids, a hydroxide or an amide; and  $R'_2$  is a peptide of 1 to 3 amino acids, an acyl or an aryl group, wherein the peptide binds  $\alpha 3 \beta 1$  integrin.

9. (Currently amended) The peptide of claim 8 ~~containing from~~, wherein the peptide contains the sequence  $X_1$ -V-R- $X_4$  and is about 4 amino acids to about 12 amino acids in length.

10. (Currently amended) A peptide ~~comprising~~ consisting of the sequence FQGV LQNVR FVF (SEQ ID NO:6) wherein every amino acid in said sequence is a D-amino acid.

11-12. (Canceled)

13. (Previously presented) A pharmaceutical composition comprising a peptide according to claim 1 and a pharmaceutically acceptable carrier.

14. (Previously presented) A sterile composition comprising a peptide according to claim 1 and a sterile aqueous solution.

15-19. (Canceled)

20. (Previously presented) A method of inhibiting adhesion of a cell expressing  $\alpha 3 \beta 1$  integrin to an extracellular matrix comprising contacting said cell with a peptide according to claim 1.

21. (Original) The method of claim 20 wherein the extracellular matrix comprises TSP1 or laminins.

22. (Original) The method of claim 20 wherein said contacting takes place *in vitro*.

23. (Original) The method of claim 20 wherein said cell comprises an epithelial or an endothelial cell.

24. (Original) The method of claim 20 wherein said cell is a tumor cell.

25. (Original) The method of claim 20 wherein said cell is a breast carcinoma cell or a small cell lung carcinoma.

26. (Previously presented) A method of inhibiting  $\alpha 3 \beta 1$  integrin-mediated cell motility, comprising contacting a cell with a peptide according to claim 1.

27. (Original) The method of claim 26 wherein said contacting occurs *in vitro*.

28. (Original) The method of claim 26 wherein the cell is an epithelial cell, an endothelial cell or a malignant cell.

29. (Previously presented) A method of inhibiting proliferation of endothelial cells, comprising contacting said cells with a peptide according to claim 1.

30. (Previously presented) A method of inhibiting proliferation of small cell lung carcinoma, comprising contacting said cell with a peptide according to claim 2.

31-36. (Canceled)

37. (Previously presented) A method of treating an angiogenesis-mediated disease in an animal comprising administering to the animal an effective amount of a peptide according to claim 1.

38. (Original) The method of claim 37 wherein the angiogenesis-mediated disease is diabetic retinopathy, retinopathy of prematurity, rheumatoid arthritis, macular degeneration, atherosclerosis plaque formation, or a cancer.

39. (Original) The method of claim 37 wherein the animal is a rat, mouse, human or nonhuman primate.

40. (Original) The method of claim 37 wherein the disease is cancer.

41. (Original) The method of claim 40 wherein the cancer is characterized by the formation of a solid tumor.

42. (Original) The method of claim 41 wherein said solid tumor tissue is a carcinoma.

43. (Original) The method of claim 37 wherein the administration is intravenous, transdermal, intramuscular, topical, subcutaneous, intracavity, or peristaltic administration.

44. (Currently Amended) A method of inducing solid tumor tissue regression in a patient comprising administering to said patient a composition sufficient to inhibit neovascularization of said solid tumor tissue, said composition comprising a peptide according to claim 1.

45. (Original) The method of claim 44 wherein said administering is conducted in conjunction with chemotherapy or radiotherapy.

46. (Currently amended) A peptide ~~comprising~~ consisting of the sequence R<sub>1</sub>-D-V-R-F-R<sub>2</sub>, or partial or full retro-inverso sequences thereof, wherein D-V-R-F is SEQ ID NO:54, R<sub>1</sub> is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R<sub>2</sub> is a peptide of 2 or 3 amino acids, a hydroxide or an amide, provided that the peptide binds  $\alpha\beta 1$  integrin.

47. (Currently amended) The peptide according to claim 46 ~~comprising~~ consisting of the sequence FQGV LQDVRFVF (SEQ ID NO:19).

48. (New) The peptide of claim 46, wherein the peptide contains the sequence DVRF (SEQ ID NO:54) and is about 4 amino acids to about 12 amino acids in length.

49. (New) The peptide of claim 46 wherein R<sub>1</sub> is a peptide consisting of the sequence selected from the group consisting of FQGVQLQ (SEQ ID NO:13), FAGVLQ (SEQ ID NO:14), FQGVAQ (SEQ ID NO:15), FQGVLA (SEQ ID NO:16), and FQGVLN (SEQ ID NO:17).

50. (New) The peptide of claim 46 that contains at least one D-amino acid.

51. (New) A pharmaceutical composition comprising a peptide according to claim 46 and a pharmaceutically acceptable carrier.

52. (New) A sterile composition comprising a peptide according to claim 46 and a sterile aqueous solution.